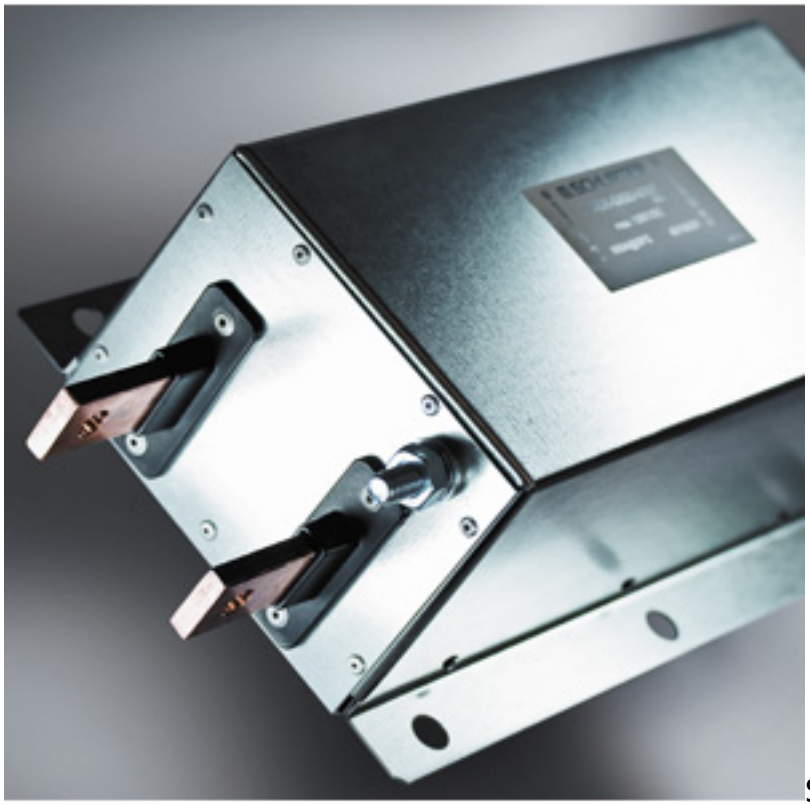
Interference Filter Designed for Use on the DC Side of the Inverter in Photovoltaic Systems



SCHURTER presents its new 2300 A FMER SOL interference filter. In addition, the series is now offered without ground capacitors to safely prevent any leakage of current to ground. The series is designed for use on the DC side of the inverter in photovoltaic and other DC systems.

Maximum Power Point (MPP) trackers generate disturbances into both the grid's AC power line, as well as the DC side of the solar module. An AC filter is typically used on the grid's AC power line, but the noise generated on the DC side tends to be overlooked. EMC standards EN 61000-6-3 and EN55014-1 also place strict limits on the noise generated downstream from the grid, such as the line to the solar panels. Using the FMER SOL DC filter on the DC side of the inverter ensures EMC compliance and thus overall reliability of the entire PV system.

Large solar inverters exposed to high temperature operating environments generally require a cooling system. The FMER SOL provides high temperature resistance to simplify the system and reduce the energy needed to cool. Accordingly, the FMER SOL filters are designed for rated currents from 25 A to 2300 A with a standard ambient temperature rating of 55°C; The series is also rated at 75ºC ambient temperature up to 1200 VDC with corresponding current de-ratings.

The DC filter is cURus approved at 600 VDC for the 25-150A versions and 1000 VDC for the versions rated 250-2300 A. The FMER SOL DC filters are equipped with screw

clamps for types up to 150 A and copper bars for types upwards of 250 A. Other types of connections, such as wires or copper bars <250 A, are available on request. Small adjustments can also be made to customize the electrical circuit or the filter housing on request.

More information on the FMER SOL can be found on the SCHURTER website at http://www.schurterinc.com/new_emc [1].

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http://www.wirelessdesignmag.com/product-releases/2013/01/interference-filter-designed-use-dc-side-inverter-photovoltaic-systems?qt-blogs=0

Links:
[1] http://www.schurterinc.com/new_emc